Ascent Battery Supply, LLC
925 Walnut Ridge Drive.
Hartland, Wisconsin 53029

Material Safety Data Sheet — Lithium (CR) Lithium Manganese Dioxide

The information and recommendations below are believed to be accurate at the date of preparation. Ascent Battery makes no warranty of merchantability or any other warranty, express or implied, with respect to such information and we assume no liability resulting from its use. This MSDS sheet provides guidelines for safe use and handling of the product. It does not and cannot advise all possible situations. Your specific use of this product should be evaluated to determine if additional precautions must be taken.

Manufacturer's Name	Shun Wo (HK) Enterprise Development Co.	**Emergency Number**	INFOTRAC (800) 535-5053
Address	Rm. B, 13/F., Prat Comm Bldg, 17-19 Prat Avenue, Tslm Sha Tsui, Kowloon Hong Kong	**Overseas Emergency Number**	INFOTRAC (800) 535-5053
Revision Date	08/22/05		

SECTION 1 – IDENTITY

Product Name	Lithium Manganese Dioxide Battery
Common Synonyms	Lithium (CR)
DOT Description	Dry Battery
Chemical Name	Lithium Manganese Dioxide; Primary Battery

SECTION 2 – HAZARDOUS INGREDIENTS

Chemical Name	CAS No.	Percentage %
Lithium	7439-93-2	2.4
Propylene Carbonate	16606-55-6	9
Manganese Dioxide	1313-13-9	22
Dimethoxymethane	109-87-5	5.8
Lithium per Chlorate	N/A	1
Graphite	7784-42-5	5.5
Stainless Steel	N/A	50.5
Other	N/A	3.8

SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point	NA	**Melting Point**	NA
Vapor Pressure	NA	**Vapor Density**	NA
Specific Gravity	NA	**Percent Volatile By Volume**	NA
Solubility in Water	NA	**Reactivity in Water**	NA
Appearance and Odor	Geo-metric, solid object	**Evaporation Rate**	NA
Flash Point	NA	**Flammable Limits in Air % by Volume**	NA
Extinguisher Media	Use Water, foam or dry powder	**Auto-Ignition Temperature**	NA

Special Fire Fighting Procedures	Wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products.
Unusual Fire and Explosion Hazards	Cells may rupture when exposed to excessive heat. This could result in the release of flammable or corrosive materials.

SECTION 4 – PHYSICAL HAZARDS

Stable or Unstable	Stable	**Conditions to Avoid**	Electrical shorting the cell.
Incompatibility (Materials to Avoid)	NA		
Hazardous Decomposition Products	NA		
Hazardous Polymerization	Will Not Occur		

SECTION 5 – HEALTH HAZARDS

Threshold Limit Value	NA
Signs and Symptoms of Exposure	None (In fire or rupture situation see section 2 and section 4.)
Medical Conditions Generally Caused by Exposure	Chemicals may cause burns to skin, eyes, gastrointestinal tract and mucous membranes.
Routes of Entry	Skin, Eyes, Swallowing
Emergency and First Aid Procedures for	Lithium Manganese Dioxide Chemicals
1. Inhalation	Get fresh air. If symptoms persist seek medical attention
2. Eyes and Skin	If a cell ruptures, flush with copious quatities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.
4. Ingestion	Ingestion of battery chemicals can be harmful. Call The National Battery Ingestion Hotline (202-625-3333) 24 hours a day, for procedures treating ingestion of chemicals. Do not induce vomiting.

SECTION 6 – SPECIAL PROTECTION INFORMATION

Respiratory Protection	NA				
Ventilation	NA	**Local Exhaust**	NA	**Mechanical** (General)	NA
Gloves	Wear gloves if cell ruptures, is corroded or leaking chemicals.	**Safety Glasses**	Always wear safety glasses when working with batteries and cells.		
Other Protective Equipment	NA				

SECTION 7 – SPECIAL PRECAUTIONS – SPILL AND LEAKAGE PROCEDURES

Precautions to be Taken when Handling and Storing	Store in dry place. Storing unpacked cells together could result in cells shorting and heating to the point of rupturing. Do not recharge. Do not puncture or abuse.
Other Precautions	If packaging materials are not available place masking taped on positive and negatives ends of the cells.
Steps to be Taken if chemicals are spilled	If cells are leaking or rupture, prevent skin and eye contact and collect all released material in a plastic lined metal container.
Waste Disposal	When completely discharged this type of lithium cell is non-hazardous and does not have specific disposal regulations. Lithium batteries that are not fully discharged may be regulated as reactive harardous waste. Ascent Battery is not aware of specific lithium battery regulations applicable to the individual consumer or to businesses for which their wastes are otherwise unregulated.
Transportation	These are considered to be "Dry Batteries" and are not considered a "Hazardous Material" per U.S. DOT (Department of Transportation) regulations or "dangerous goods" per IATA (International Air Transport Associtation) regulations.